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April 2, 2004

CERTIFICATE OF MAILING 37 C.F.R. 1.8	
I certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Attn.: Mary Mosher, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date below:	
April 2, 2004	
Date	Michael R. Krawzsenek

**Attn.: Mary Mosher**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

RE: *U.S. Patent Application No. 09/880,609 entitled "AN IMPROVED METHOD FOR THE PRODUCTION AND PURIFICATION OF ADENOVIRAL VECTORS" – Shuyan Zhang et al.*  
*Our reference: INRP:081USD1*

Sir:

Enclosed for filing in the above-referenced patent application is a Supplemental Information Disclosure Statement and Form PTO-1449.

A fee as set forth in 37 C.F.R. § 1.17(p) in the amount of \$180.00 is enclosed. If an appropriate check has not been enclosed, or if it is insufficient, the Commissioner is authorized to deduct the appropriate fees from Fulbright & Jaworski L.L.P. Account No.: 50-1212/INRP:081USD1.

Please date stamp and return the enclosed postcard evidencing receipt of these materials.

Respectfully submitted,

Michael R. Krawzsenek  
Reg. No. 51,898

MRK/kmv  
Encl.: as noted

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:  
Shuyuan Zhang *et al.*

Serial No.: 09/880,609

Filed: June 12, 2001

For: AN IMPROVED METHOD FOR THE  
PRODUCTION AND PURIFICATION OF  
ADENOVIRAL VECTORS

Group Art Unit: 1648

Examiner: Mary Mosher


Atty. Dkt. No.: INRP:081USD1

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37 C.F.R. 1.8

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April 2, 2004

Date

  
Michael R. Krawzsenek

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Attn.: Mary Mosher  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 be considered by the Examiner and made of record.

In accordance with 37 C.F.R §§ 1.97(g), (h), this Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

This application is a divisional application of Serial No. 09/203,078, filed December 1, 1998, and is relied upon for an earlier filing date under 35 U.S.C. § 120. In accordance with Rule 37 C.F.R. § 1.98(d) copies of the listed documents are not enclosed as they have been previously cited by or submitted to the Patent and Trademark Office in prior application Serial No. 09/203,078.

A fee as set forth in 37 C.F.R. § 1.17(p) in the amount of \$180.00 is enclosed herewith. If an appropriate check has not been enclosed, or if it is insufficient, the Commissioner is authorized to deduct the appropriate fee from Fulbright & Jaworski Account No.: 50-1212/INRP:081USD1.

Applicants respectfully request that the listed documents be made of record in the present case.

Respectfully submitted,



Michael R. Krawzsenek  
Reg. No. 51,898  
Attorney for Applicants

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Date: April 2, 2004

Form PTO-1449 (modified) APR 06 2004  
 List of Patents and Publications for Applicant's  
 INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Atty. Docket No.  
 INRP:081USD1

Serial No.  
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Applicant  
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Group:  
 1648

U.S. Patent Documents  
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Foreign Patent Documents  
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### U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	A6	4,725,547	2/16/88	Sakamoto <i>et al.</i>	435	239	8/9/85
	A7	4,797,368	1/10/89	Carter <i>et al.</i>	435	320	3/15/85
	A8	5,139,941	8/18/92	Muzycka <i>et al.</i>	435	172.3	10/25/91
	A9	5,552,309	9/3/96	March	435	172.3	9/30/94
	A10	5,607,851	3/4/97	Pellegrini <i>et al.</i>	435	236	7/18/94
	A11	5,744,304	4/28/98	Munford	435	6	5/30/95
	A12	5,789,244	8/4/98	Heidrum <i>et al.</i>	435	320.1	1/8/96
	A13	5,837,520	11/17/98	Shabram <i>et al.</i>	435	239	3/07/95
	A14	6,194,210	2/27/01	Leu and Seifert	435	403	4/17/96

### Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
	B9	1279843	11/10/89	Japan			ABSTRACT
	B10	4-9338	1/14/92	Japan			ABSTRACT
	B11	EP 0475623	3/18/92	Europe			
	B12	WO 00/34444	6/15/00	PCT			
	B13	WO 93/18790	9/30/93	PCT			
	B14	WO 93/25224	12/23/93	PCT			
	B15	WO 94/06910	3/31/94	PCT			
	B16	WO 95/10601	4/20/95	PCT			
	B17	WO 95/19427	7/20/95	PCT			
	B18	WO 95/25789	9/28/95	PCT			
	B19	WO 96/32116	10/17/96	PCT			

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List of Patents and Publications for Applicant's

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Applicant

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## Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
	B20	WO 97/04803	2/13/97	PCT			
	B21	WO 98/35554	8/20/98	PCT			
	B22	WO 99/12568	3/18/99	PCT			
	B23	WO 99/41416	8/19/99	PCT			

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	C104	Cartwright, "Fermenter design for animal cell cultures," Animal Cells as Bioreactors, Cambridge University Press, 58-63, 1994.
	C105	Carver <i>et al.</i> , "Transgenic livestock as bioreactors: stable expression of human alpha-1-antitrypsin by a flock of sheep," <i>Biotechnology NY</i> , 11:1263-1270, 1993.
	C106	Complaint Aventis Pharmaceuticals Products Inc. and Aventis Pharma, S.A., Plaintiffs, v. Introgen Therapeutics, Inc., Defendant. Civil Action No. 01-451 from the U.S. District Court for the District of Delaware, June 29, 2001.
	C107	Corveleyn and Remon, "Maltodextrins as lyoprotectants in the lyophilization of a model protein, LDH," <i>Pharm. Res.</i> , 13:146-150, 1996.
	C108	Croyle <i>et al.</i> , "Factors that influence stability of recombinant adenoviral preparations for human gene therapy," <i>Pharm. Dev. Technol.</i> , 3(3):373-383, 1998.
	C109	Fried and Bromberg, "Factors that affect the stability of protein-DNA complexes during gel electrophoresis," <i>Electrophoresis</i> , 18:6-11, 1997.
	C110	Hall <i>et al.</i> , "Stabilizing effect of sucrose against irreversible denaturation of rabbit muscle lactate dehydrogenase," <i>Biophys. Chem.</i> , 57:47-54, 1995.
	C111	Herman <i>et al.</i> , "The effect of bulking agent on the solid-state stability of freeze-dried methylprednisolone sodium succinate," <i>Pharm. Res.</i> , 11:1467-1473, 1994.
	C112	Kotani <i>et al.</i> , "Improved methods of retroviral vector transduction and production for gene therapy," <i>Human Gene Therapy</i> , 5:19-28, 1994

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## Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C113	Kotani, "Serum-free production of adenoviral vectors for gene therapy," Williamsburg BioProcessing Conference, Nov. 18-21, 1996.
	C114	Lentfer and Conde, "A rapid and inexpensive procedure for the purification of adenovirions," <i>Archives of Virology</i> , 56:189-193, 1978.
	C115	Lu <i>et al.</i> , "Coat protein interactions involved in tobacco mosaic tobamovirus cross-protection," <i>Virology</i> , 248:188-198, 1998.
	C116	Lueckel <i>et al.</i> , "Formulations of sugars with amino acids or mannitol--influence of concentration ratio on the properties of the freeze-concentrate and the lyophilizate," <i>Pharm. Dev. Technol.</i> , 3:326-336, 1998.
	C117	Montagnon, "Polio and rabies vaccines produced in continuous cell lines: a reality for vero cell line," <i>Develop. Biol. Standard.</i> , 70:27-47, 1989.
	C118	Mori <i>et al.</i> , "Frequent somatic mutation of the <i>MTS1/CDK4I</i> (Multiple Tumor suppressor/Cyclin dependent Kinase 4 Inhibitor) gene in esophageal squamous cell carcinoma," <i>Cancer Res.</i> , 54:3396-3397, 1994.
	C119	Nadeau <i>et al.</i> , <i>Biotechnology and Bioengineering</i> , 51:613-623, 1996.
	C120	Payment <i>et al.</i> , In: <i>Biotechnology Current Progress</i> , ed. P.N. Cheremisinoff <i>et al.</i> , Technomic Publishing, 1991.
	C121	Racher <i>et al.</i> , "Culture of 293 cells in different culture systems: cell growth and recombinant adenovirus production," <i>Biotechnology Techniques</i> , 9:169-174, 1995.
	C122	Sagrera <i>et al.</i> , "Study of the influence of salt concentration on Newcastle disease virus matrix protein aggregation," <i>Biochem. Mol. Biol. Int.</i> , 46:429-435, 1998.
	C123	Trepanier <i>et al.</i> , <i>Journal of Virological Methods</i> , 3:201-211, 1981.
	C124	Vanlandschoot <i>et al.</i> , "pH-dependent aggregation and secretion of soluble monomeric influenza hemagglutinin," <i>Arch. Virol.</i> , 143:227-239, 1998.
	C125	Vossen and Fried, "Sequestration stabilizes lac repressor-DNA complexes during gel electrophoresis," <i>Anal. Biochem.</i> , 245:85-92, 1997.
	C126	Wills and Menzel, "Adenovirus Vectors for Gene Therapy of Cancer," <i>J. of Cellular Biochem.</i> , Suppl: 17E, S216:206, 1993.

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